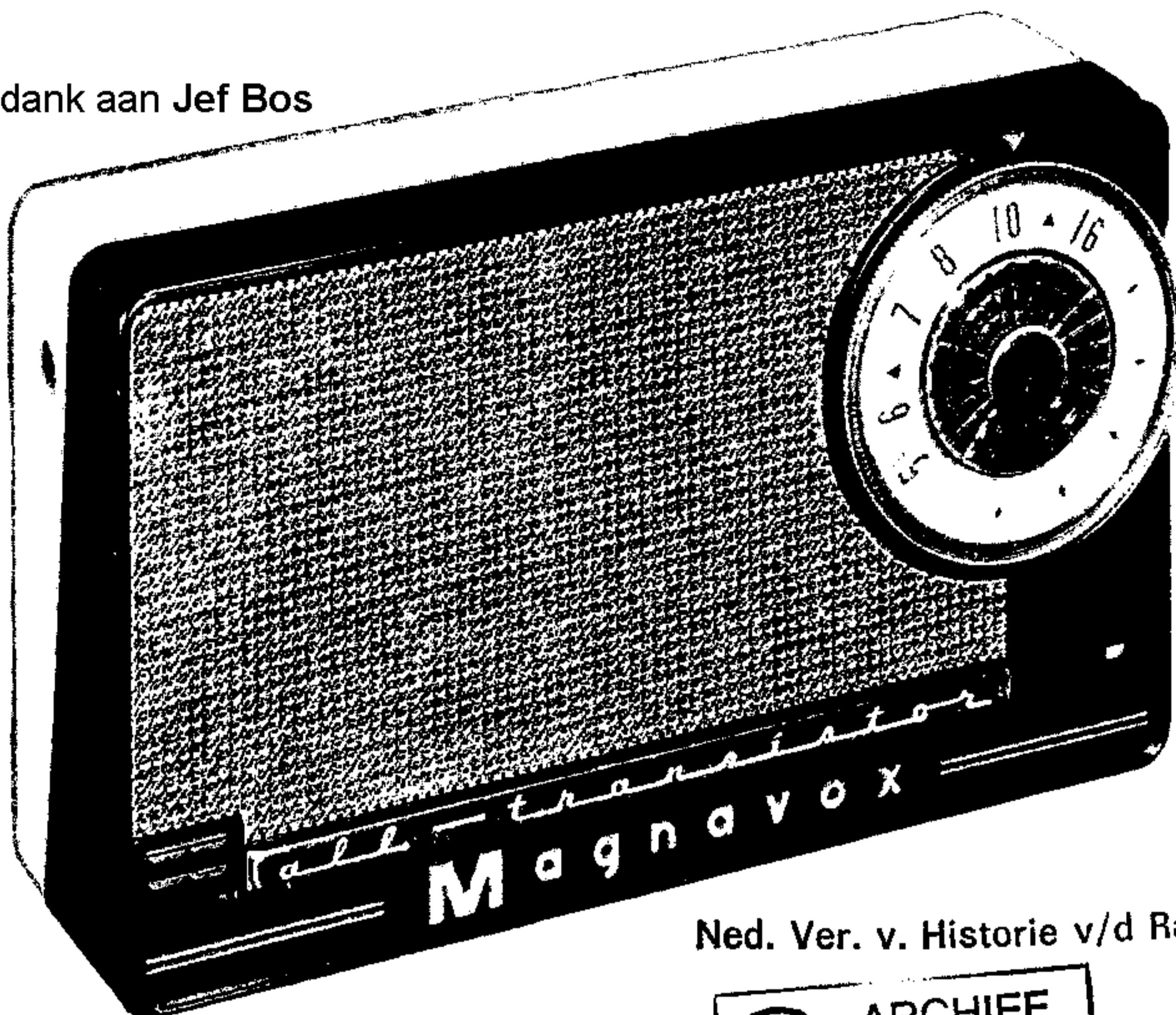
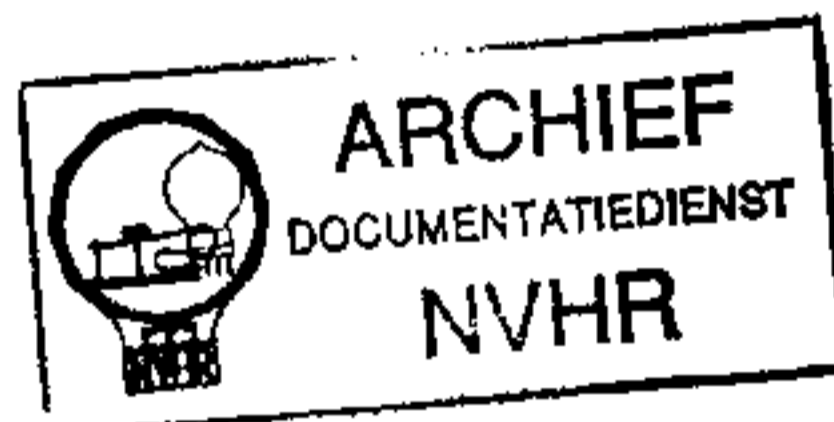




Met dank aan Jef Bos



Ned. Ver. v. Historie v/d Radio



TRADE NAME Magnavox Chassis CR729AA, CR729BA
MANUFACTURER Magnavox Co., 2131 Bueter Rd., Fort Wayne, Ind.
TYPE SET Battery Operated Portable Transistorized AM Receiver

POWER SUPPLY 4 Volts

RATING 9MA @4 Volts DC

TUNING RANGE—BROADCAST 535KC-1620KC

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

Volume control should be at maximum position. Output of signal generator should be no higher than necessary to obtain an output reading. Use an insulated alignment screwdriver for adjusting.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1. .1MFD	High side to antenna lug on tuning gang. Low side to chassis.	455KC (400% Mod)	Tuning gang fully open	Across earphone jack	A1, A2, A3	Adjust for maximum output.
2.	Loop	1620KC	"	"	A4	Fashion loop of several turns of wire and radiate signal into loop of receiver. Adjust for maximum output.
3.	"	1400KC	Tune to 1400KC signal	"	A5	"
4.	"	535KC	Tuning gang fully closed	"	A6	"

Note: Chassis number was not stamped on initial production chassis. These chassis are CR729AA.

HOWARD W. SAMS & CO., INC. • Indianapolis 5, Indiana

"The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc., by the manufacturers of the particular type of replacement part listed." "Reproduction or use, without express permission, of editorial or pictorial content, in any manner, is prohibited. No patent liability is assumed with respect to the use of the information contained herein. Copyright 1957 by Howard W. Sams & Co., Inc., Indianapolis 5, Indiana, U. S. of America. Copyright under international Copyright Union. All rights reserved under Inter-American Copyright Union (1910) by Howard W. Sams & Co., Inc." Printed in U. S. of America

G807

PARTS LIST AND DESCRIPTIONS

TRANSISTORS

ITEM No.	USE	TYPE	NOTES	ITEM No.	USE	TYPE	NOTES
X1	Converter	2N172		X4	AF Amplifier	310	
X2	1st. IF Amplifier	2N145	Note 1	X5	Output	353	Note 2
X3	2nd. IF Amplifier	2N147	Note 1	X6	Output	353	Note 2

Note 1. Chassis CR729AA may use type 2N146 for X2 and X3. Chassis CR729BA may use type R03 for X2 and X3. Some CR729BA chassis may use type R02 for X2 and type R04 for X3.

Note 2. Type 2N185 is used in Chassis CR729BA.

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						
	CAP.	VOLT.	MAGNAVOX PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	PYRAMID PART No.	SANGAMO PART No.	SPRAGUE PART No.
C1	50	6	25E105-4	XPP6V50	EC50-10	TAP25-10	ML-40-6		TE-1095
C2	10	6	25E105-3	XPP6V10	EC10-6		ML-10-6		TE-1087
C3	50	6	25E105-4	XPP6V50	EC50-6		ML-40-6		TE-1095
C4	50	6	25E105-4	XPP6V50	EC50-6		ML-40-6		TE-1095
C5	50	6	25E105-4	XPP6V50	EC50-6		ML-40-6		TE-1095

FIXED CAPACITORS

Capacity values given in the rating column are in mfd. for Paper Capacitors; and in mmfd. for Mica and Ceramic Capacitors.

ITEM No.	RATING		REPLACEMENT DATA							NOTES
	CAP.	VOLT	MAGNAVOX PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	MALLORY PART No.	SPRAGUE PART No.	
C6	.05	200	23E4010	BPD-01	DD-103	K082	811-01	DC-511	5HK-81	Note 1
C7	10000	200	23E4009							
C8	16		23E4001-38							
C9	.05	23E4010								
C10	10000	23E4009								
C11	.05	200	23E4010	BPD-01	DD-103	K082	811-01	DC-511	5HK-81	Note 2
C12	50000	23E4008								
C13	10000	23E4009								
C14	10000	23E4009								
C15	18	23E4001-38								
C16	5000	23E4009-2	BPD-005	DD-502	K080	811-005	DC-525	5HK-D5	Note 3	
C17	100000	23E4008-2								

Note 1. Chassis CR729BA use 10MMF in this application (Part # 23E4001-40).

Note 2. Not used in Chassis CR729BA.

CONTROLS

ITEM No.	RATING		REPLACEMENT DATA					INSTALLATION NOTES
	RESISTANCE	WATTS	MAGNAVOX PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	IRC PART No.	MALLORY PART No.	
R1	5000Ω	½	28E174					Volume & Switch

RESISTORS

All wattages 1/2 watt, or less, unless otherwise listed.

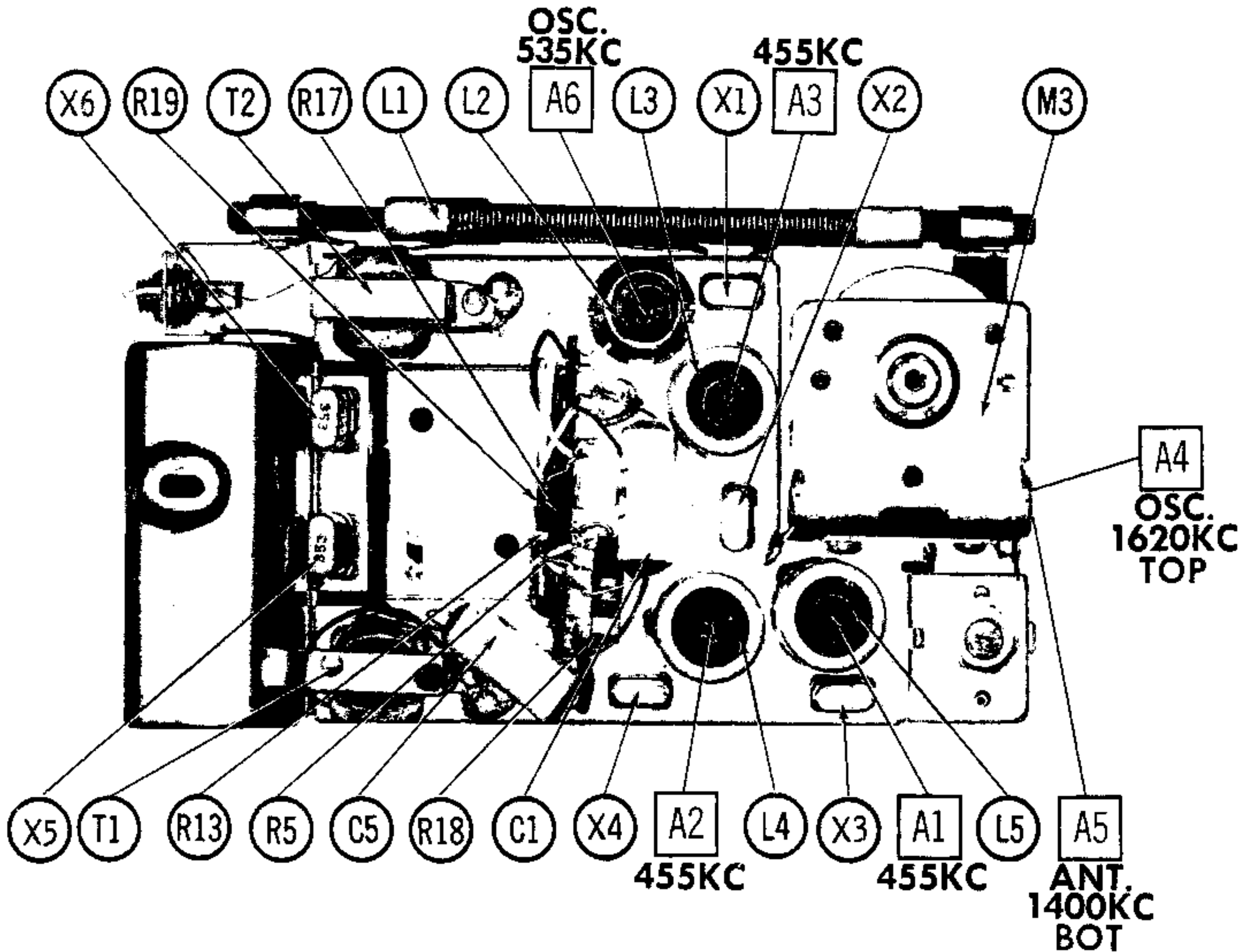
ITEM No.	RATING		REPLACEMENT DATA			ITEM No.	RATING		REPLACEMENT DATA			NOTES
	OHMS	WATT	MAGNAVOX PART No.	IRC PART No.	NOTES		OHMS	WATT	MAGNAVOX PART No.	IRC PART No.	NOTES	
R2	100K		27E104K-1/3	BTR-100K	Note 1	R12	6800Ω	27E682K-1/3	BTR-6800	Notes 2		
R3	220K		27E224M-1/3	BTR-220K		R13	3300Ω	27E332K-1/3	BTR-3300			
R4	1500Ω		27E152K-1/3	BTR-1500		R14	5600Ω	27E562K-1/3	BTR-5600			
R5	39K		27E393K-1/3	BTR-39K		R15	2200Ω	27E222K-1/3	BTR-2200			
R6	220Ω		27E221K-1/3	BTR-220		R16	470Ω	27E471K-1/3	BTR-470			
R7	220Ω		27E221K-1/3	BTR-220	R17	100Ω	27E101K-1/3	BTR-100	Note 3			
R8	4700Ω		27E472K-1/3	BTR-4700	R18	4.7Ω	27E1015-11	BW½-4.7				
R9	5600Ω		27E562K-1/3	BTR-5600	R19	100Ω	27E101K-1/3	BTR-100				
R10	1000Ω		27E102K-1/3	BTR-1000	R20	15K	27E153K-1/3	BTR-15K	Note 3			
R11	330Ω		27E331K-1/3	BTR-330	R21	15K	27E153K-1/3	BTR-15K				

Note 1. Not used in Chassis CR729BA.

Note 2. Chassis CR729BA use 56Ω (Part #27E560K-1/3).

Note 3. Not used in Chassis CR729AA.

CHASSIS—TOP VIEW



PARTS LIST AND DESCRIPTIONS (Continued)

TRANSFORMER (DRIVER)

ITEM No.	Resistance		REPLACEMENT DATA					NOTES	
	PRI.	SEC.	MAGNAVOX PART No.	Haldorson PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.		Triad PART No.
	Turns Ratio								
T1	245Ω	39.5Ω CT	22E115B				TR-4 ①		① Fabricate mounting.
	1.7: 1								

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES	
	PRI.	SEC.	MAGNAVOX PART No.	Haldorson PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.		Triad PART No.
T2	650Ω	16Ω	22E116				TR-20 ①		① Fabricate mounting.

SPEAKER

ITEM No.	RATINGS			REPLACEMENT DATA			NOTES
	SIZE	FIELD	V. C. IMP.	MAGNAVOX PART No.	QUAM PART No.	RCA TYPE No.	
SP1	2 3/4"	PM	16Ω	1E73			

COILS (RF-IF)

ITEM No.	USE	DC RES.		REPLACEMENT DATA				NOTES
		PRI.	SEC.	MAGNAVOX PART No.	MEISSNER PART No.	MERIT PART No.	MILLER PART No.	
L1	Loop Stick	.1Ω	.8Ω	64E40				* Tapped @ .3Ω ■ Tapped @ .4Ω
L2	Osc. Coll	2.5Ω	8.8Ω*	20E1231				
L3	1st. IF Trans.	1.4Ω	.6Ω	20E1229				
L4	2nd. IF Trans.	1.4Ω	.6Ω	20E1229				
L5	3rd. IF Trans.	1.1Ω	2Ω ■	20E1230				

BATTERIES

ITEM No.	VOLTAGE	MAGNAVOX PART No.	REPLACEMENT DATA						INSTALLATION NOTES
			EVEREADY			BURGESS			
			"A"	"B"	"A-B"	"A"	"B"	"A-B"	
M1	4V	530043-1	E233						

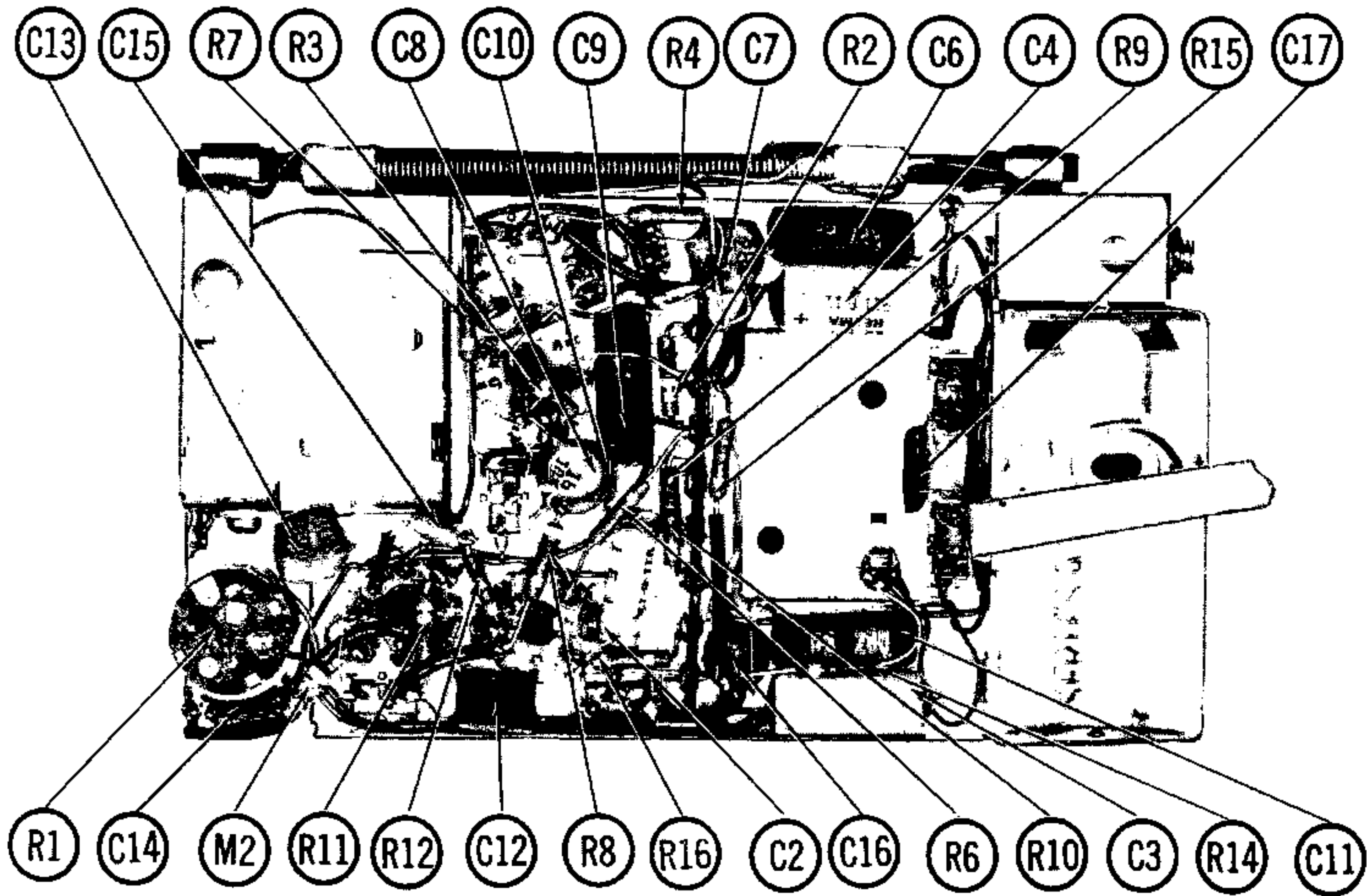
CRYSTAL DIODES

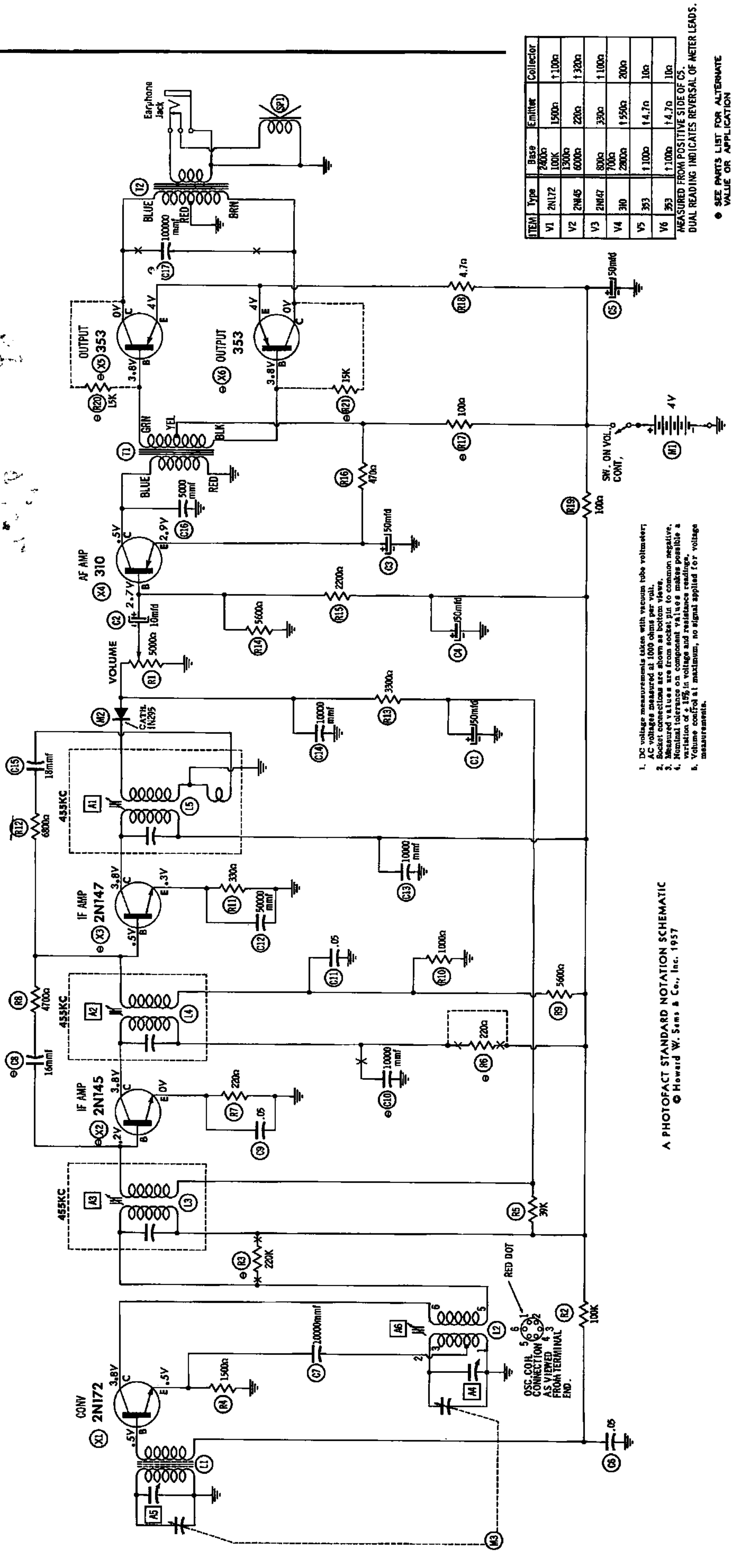
ITEM No.	ORIG. TYPE	REPLACEMENT DATA		NOTES
		MAGNAVOX PART No.	SYLVANIA PART No.	
M2	1N295	95E2	1N80	Audio Det. (Pigtail)

MISCELLANEOUS

ITEM No.	PART NAME	MAGNAVOX PART No.	NOTES
M3	Tuning Cap.	24E78	2 Gang (19-220MMF, 23-120MMF)
	Cabinet Front	20E1235-7	(Red) Includes jewel, grille and decorative strip
	Cabinet Front	20E1235-8	(Ivory) Includes jewel, grille and decorative strip
	Cabinet Front	23E1235-9	(Black) Includes jewel, grille and decorative strip
	Cabinet Back	7E543	Red
	Cabinet Back	7E543-2	Ivory
	Cabinet Back	7E543-3	Black
	Knob	37E117	On-off-volume
	Dial	37E118-2	Tuning

CHASSIS—BOTTOM VIEW





1. DC voltage measurements taken with vacuum tube voltmeter; AC voltages measured at 1000 ohms per volt.
2. Socket connections are shown as bottom views.
3. Measured values are from socket pin to common negative.
4. Nominal tolerance on component values makes possible a variation of $\pm 15\%$ in voltage and resistance readings.
5. Volume control at maximum, no signal applied for voltage measurements.

A PHOTOFAC STANDARD NOTATION SCHEMATIC
 © Howard W. Sams & Co., Inc. 1957

ITEM	Type	Base	Emitter	Collector
V1	2N172	2400 Ω	1500 Ω	1100 Ω
V2	2N145	1300 Ω	220 Ω	1320 Ω
V3	2N147	800 Ω	330 Ω	1100 Ω
V4	310	700 Ω	2800 Ω	1550 Ω
V5	353	1100 Ω	14.7 Ω	10 Ω
V6	353	1100 Ω	14.7 Ω	10 Ω

MEASURED FROM POSITIVE SIDE OF C5.
 DUAL READING INDICATES REVERSAL OF METER LEADS.

SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION